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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,989	12/01/2003	Visvesvaraya A. Pentakota	TI-37261	1873
23494 7590 02/09/2007 TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			EXAMINER TON, MY TRANG	
			ART UNIT	PAPER NUMBER
			2816	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/724,989	PENTAKOTA ET AL	
	Examiner	Art Unit	
	My-Trang N. Ton	2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6,7,10,11,18,19,22,23,26 and 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6,7,18 and 19 is/are allowed.
- 6) ☒ Claim(s) 10,11,22,23,26 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


MY-TRANG N. TON
PRIMARY EXAMINER

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 10 is objected to because of the following informalities: line 3, before “node”, “said” should be cancel.

Claim Rejections - 35 USC § 103

Claims 10-11 and 22-23 remain rejected under 35 U.S.C 103(a) as being unpatentable over Flannagan (U.S Patent No. 6,031,408) and further in view of Li (U.S Patent No. 6,836,160) for the reasons recited in the last Office action.

Claims 10-11 and 22-23 remain rejected under 35 U.S.C 103(a) as being unpatentable over Flannagan (U.S Patent No. 6,031,408) and further in view of Kimura (U.S Patent No. 5,990,727) for the reasons recited in the last Office action.

Regarding the limitation “the circuit is contained in an ADC circuit “ recited in claims 26-27 are seen to define intended use. The circuit of Flannagan is capable of containing in an ADC circuit as recited. *In re Tuominen*, 213 USPQ 89 (CCPA 1982) & *In re Pearson*, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974).

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In response to Applicant's amendment filed on 11/14/06, the rejection made in the last Office action on the Beeman's reference (U.S Patent No. 6,614,284) is withdrawn.

Response to Arguments

Applicant's arguments filed 11/14/06 have been fully considered but they are not persuasive.

In response to Applicant's argument that there is no suggestion to combine Flannagan and Li references since Li who has goals completely unrelated to Flannagan. However, there is no requirement that a motivation to make the modification be expressly the same goals (temperature dependency or no temperature dependency). The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. In re McLaughlin, 170 USPQ 209 (CCPA 1971). In this case, the Li reference was only cited simply to teach the well-known arrangement of the resistor connected between the transistor and ground. Even though Li use bipolar transistors not MOSET, however, bipolar transistors are well-known switching devices and patentable equivalent to MOSFETs because of the well-known advantages in performance and integration. FETs have very short switching times and very low electrical power consumption. Bipolar can be used to sample a signal of higher frequency.

The Examiner only established a prima facie case of obviousness by demonstrating that it is well known in the art to add the resistor connected between the

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source terminal of transistor and ground as shown in Li. With the advance of today's technology, the skilled artisan would have been motivated to employ the combination of these techniques in order to be able to improve accuracy distortion.

The same arguments applied to Li and Flannagan's references above are applied to the suggestion for combining Flannagan and Kimura (U.S Patent No. 5,990,727). That is, the Examiner only established a prima facie case of obviousness by demonstrating that it is well-known in the art to add the resistor connected between the source terminal of transistor and ground as shown in Kimura (see Fig. 19). The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. In this case, Examiner merely viewing of the most pertinent prior art and combining them on a reasonable basis. The Kimura reference was only cited simply to teach such well-known structure of the resistor connected between the transistor and ground.

Finally, in response to Applicant's argument that Applicants traverse the statement that FETs are patentable equivalent to bipolar transistors since both kinds of transistors are available to Flannagan. Such argument is not persuasive because the patentable equivalent statement is applied to the bipolar structure, for example: the Li reference.

Therefore, these claims are not seen to distinguish the present invention over these prior arts.

Allowable Subject Matter

Claims 6-7 and 18-19 are allowable over the prior art of record.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to My-Trang N. Ton whose telephone number is 571-272-1754. The examiner can normally be reached on 7:00 a.m - 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



My-Trang N. Ton
Primary Examiner
Art Unit 2816

February 5, 2007